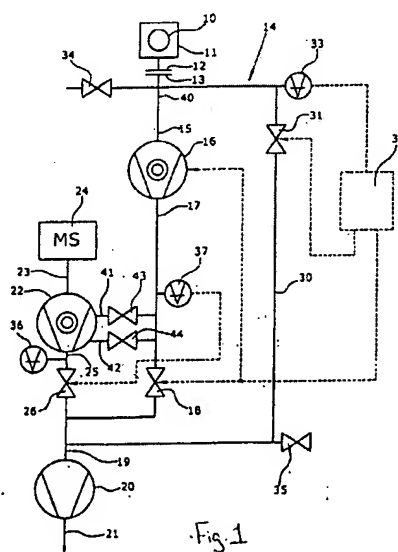


REMARKS

Claims 5-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,585,548 to Grosse Bley et al. ("Grosse Bley '548") in view of U.S. Patent No. 4,225,288 to Mugele et al. ("Mugele '288"). Alternatively, Claims 5-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Grosse Bley '548 in view of Mugele '288 and as suggested by U.S. Patent No. 3,520,176 to Becker ("Becker '176").

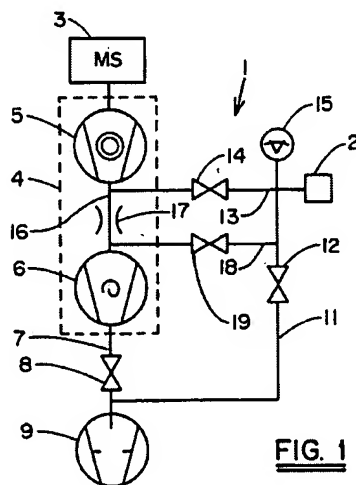
In the Final Rejection, the Examiner relies upon the combination of the Grosse Bley '548 and the Mugele '288 references in rejecting the pending claims under 35 U.S.C. § 103(a), including Claim 5, the sole pending independent claim. Applicants respectfully disagree with the Examiner's reliance on these references as disclosing several claimed elements, and therefore submit this Request for Reconsideration.

In response to the previous Office Action, Applicants amended Claim 5 to require that the **second valve (i) is provided between the exit side of the first vacuum pump and the primary pump, and (ii) is controlled in response to the pressure at the inlet of the leak detector**. With reference to Figure 1, support for this amendment was found in the specification stating, "[a] control 32 controls the first valve 31 and the **second valve 18** connected with the exit side 17 of the high vacuum pump 16 in dependence on the pressure at the inlet 13 which is measured by a pressure gauge 33." (Specification at page 4, paragraph [0017])



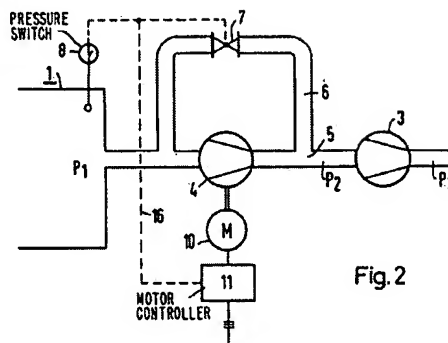
Valve 18, therefore, is a switch valve located between the first high vacuum pump 16 and the primary pump 20 that is controlled, meaning turned either on or off, at any given time depending on the pressure at the inlet of the leak detector.

In the rejection, the Examiner asserts that Grosse Bley '548 discloses a “**‘second’ valve (12)** provided between the pressure gage [sic] and the primary pump” (July 17, 2008 Office Action at p. 4), as shown in Grosse Bley '548 Figure 1:



However, the Examiner also admits that “Grosse Bley et al does not disclose a ‘first’ vacuum pump having an entry side that is connected to the inlet of the leak detector and the exit side that is connected to the primary pump, a bypass with a ‘first’ valve connecting the inlet of the leak detector to the primary pump, wherein the ‘first’ high vacuum pump is connected to the inlet of the leak detector in a non-throttled manner without valving.” (July 17, 2008 Office Action at p. 4)

The Examiner attempts to satisfy this limitation by combining Grosse Bley '548 with Mugele '288 by introducing “a ‘first’ high vacuum pump (4) as taught by Mugele et al at the connection to the chamber (2) of Grosse Bley et al in a non-throttled manner without valving, and includ[ing] a bypass (6) with a ‘first’ valve (7) as taught by Mugele et al between the connection to the chamber (2) and the primary pump (3) of Grosse Bley et al.” (July 17, 2008 Office Action at p. 5) (see Figure 2 of Mugele '288, shown below)



The Examiner goes on to state that “the device of Grosse Bley et al modified by Mugele et al has a **‘second’ valve (8 of Grosse Bley et al)** that remains closed until forevacuum pressure is reached after which it is opened, and Mugele et al states that the ‘first’ vacuum pump is started only after a vacuum of 40 Torr is reached, therefore the ‘second’ valve is ‘controlled’ by opening it in response to the pressure at the inlet (forevacuum pressure) of the leak detector, also at which point the ‘first’ vacuum pump is simultaneously started.” (July 17, 2008 Office Action at p. 5)

Therefore, the Examiner has identified two different elements, both 8 and 12 in Grosse Bley ‘548, as satisfying the “second valve” limitation of Claim 5. Although Applicants realize the Examiner’s reference to two different elements as disclosing the same claim limitation may be a typographical error, Applicants will address each element in turn. Initially, with respect to element 12, Applicants respectfully assert that nowhere in Grosse Bley ‘548 is valve 12 controlled in response to the pressure at the inlet of the leak detector. In fact, the **only** mention of valve 12 in the specification is that, “the connection 2 of the leak detector 1 is connectable to the forevacuum pump 9 via line 11 with **valve 12**,” (Grosse Bley ‘548 at col. 2, line 66 to col. 3, line 2) and “[a]t first the specimen which is not shown and which is connected to connection 2 is evacuated, whereby valves 8, 14, 19 are closed and where **valve 12 is open**.” (Grosse Bley ‘548 at col. 3, lines 32-35) As such, Grosse Bley ‘548 lacks any disclosure as to the opening or closing of valve 12 in response to the pressure at the inlet of the leak detector. Therefore, with regard to element 12, Grosse Bley ‘548 does not disclose a second valve located between the exit side of the first high vacuum pump and the

primary pump **that is controlled in response to the pressure at the inlet of the leak detector** as required by the pending claims.

Even in combination with Mugele '288, element 12 of Grosse Bley '548 would fail to disclose a second valve located between the exit side of the first high vacuum pump and the primary pump that is controlled in response to the pressure at the inlet of the leak detector. The Examiner states that Mugele '288 discloses "a bypass (6) with a **'first' valve (7)**." (July 17, 2008 Office Action at p. 5) With regard to element 7, the specification of Mugele '288 states, "[o]nce a sufficient vacuum has been achieved in the space 1, e.g. a vacuum of 40 Torr, a pressure sensor 8 causes a **control valve 7** to shut off the bypass line 6 and through a control signal over a line 16 operates a control device 11 to start up the motor 10 driving the side channel ring compressor 4." (Mugele '288 at col. 3, lines 16-21) In fact, the only disclosure in Mugele '288 concerning valve control based on inlet pressure is that related to control valve 7, which is located in the bypass.

As such, at best, Mugele '288 arguably discloses the control of a bypass valve (*i.e.*, Mugele '288 element 6, referred to by the Examiner as a "first valve", in the Grosse Bley '548 and Mugele '288 combination) connected to the inlet and the primary pump based on the pressure at the inlet. Mugele does not disclose the control of a second valve (*i.e.*, Grosse Bley '548 element 12, referred to by the Examiner as a "second valve") based on the pressure at the inlet. Therefore, the combination of Grosse Bley '548 and Mugele '288 fails to disclose a second valve located between the exit side of the first high vacuum pump and the primary pump **that is controlled in response to the pressure at the inlet of the leak detector** as required by the pending claims.

With regards to element 8, Figure 1 of Grosse Bley '548, shown above, makes clear that valve 8 is located between the **second high vacuum pump** and the primary pump. As stated in the specification, "[t]he outlet side of **pump stage 6** [(which is part of what the Examiner has identified as the 'second' high vacuum pump 4)] . . . is connected via line 7 with **valve 8** to the inlet of the forevacuum pump 9." (Grosse Bley '548 at col. 2, lines 63-66) Therefore, it cannot be said that the Grosse Bley '548 and Mugele '288 combination discloses a second valve **located between the exit side of the first high vacuum pump and the primary pump** that is controlled in response to

the pressure at the inlet of the leak detector as required by the pending claims. Furthermore, the same argument made with regard to element 12 of Grosse Bley '548 concerning the failure of Mugele '288 to disclose the control of the second valve based on the pressure at the inlet applies to element 8 as well.

Accordingly, because Grosse Bley '548 and Mugele '288 fail either individually or in combination to disclose a second valve provided between the exit side of the first high vacuum pump and the primary pump that is controlled in response to the pressure at the inlet of the leak detector, the combination of Grosse Bley '548 and Mugele '288 fails to disclose all of the limitations of Claim 5. Therefore, Applicants respectfully submit that the invention claimed in amended Claim 5 is not rendered obvious by the prior art, and that Claim 5 is in allowable condition.

The Examiner has alternatively rejected Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Grosse Bley '548 in view of Mugele '288 and as suggested by Becker '176. Although the Examiner relies on Becker '176 as evidence of motivation to combine the Grosse Bley '548 and Mugele '288 references, it has already been shown that such a combination fails to disclose all of the limitations of Claim 5. Therefore, the combination of Grosse Bley '548 in view of Mugele '288 and as suggested by Becker '176 also fails to disclose all of the limitations of Claim 5, and Applicants respectfully submit that the invention claimed in Claim 5 is not rendered obvious by the prior art. As such, Applicants believe Claim 5 is in allowable condition.

For all of these reasons, Applicants respectfully request that the Examiner's rejection of claim 5 be withdrawn upon reconsideration. Furthermore, since "[d]ependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious," *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988), Applicants request that the Examiner's rejection to dependent claims 6-8, all of which depend from independent claim 5, also be withdrawn. In view of these arguments, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0289, under Order No. 327_106 from which the undersigned is authorized to draw.

Application No. 10/553,457
Request For Reconsideration dated August 29, 2008
After Final Office Action of July 17, 2008

Docket No.: 327_106

Dated: August 29, 2008

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